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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/224,980	01/04/1999	ANTHONY R. WALDROP	2003-1	3080

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MILLIKEN & COMPANY
920 MILLIKEN RD
PO BOX 1926
SPARTANBURG, SC 29304

EXAMINER

BEFUMO, JENNA LEIGH

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 02/28/2002

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/224,980

Applicant(s)

WALDROP ET AL.

Examiner

Jenna-Leigh Befumo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,7 and 10-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6,7 and 10-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Amendment B, submitted as Paper No. 9 on January 10, 2002, has been entered. Claims 8 and 9 have been cancelled. Claims 6, 7, and 10 – 14 have been amended. Therefore, the pending claims are claims 6, 7, and 10 - 14.
2. The rejections to claims 8 and 9, set forth in the previous Office Action are moot since the claims were cancelled by Amendment B.
3. Amendment B is sufficient to overcome the objection to the specification set forth in section 4 of the previous Office Action.
4. Amendment B is sufficient to overcome the objections to claims 11 – 14 set forth in section 6 of the previous Office Action.
5. Amendment B is sufficient to withdraw the 35 USC 112 1st paragraph rejection to claim 7 set forth in section 8 of the previous Office Action.
6. Amendment B is sufficient to withdraw the 35 USC 102 rejection to claim 6 and the 35 USC 103 rejection to claim 10 over Gretzinger et al. (4,469,739), as well as the 35 USC 102 rejection over McLarty, III (5,855,991) set forth in section 16, 17 and 21 of the previous Office Action since neither reference discloses UV stabilized textured polyester yarns with an elastomeric base. However, new rejections are set forth below.
7. Amendment B is sufficient to withdraw the 35 USC 103 rejection to claims 6 and 10 over McLarty, III (5,533,789) set forth in section 19 of the previous Office Action since there is no suggestion or motive to make the knit fabric less elastic by making the warp-knit fabric a woven fabric.

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8. Additionally, the 35 USC 103 rejection to claim 6 over Gretzinger et al. in view of McLarty, III '789 set forth in section 20 of the previous Office Action is withdrawn because the rejection was a typographical error.

Claim Rejections - 35 USC § 112

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The specification does not provide support for including a sheath/core bicomponent in the second set of yarns. The sheath/core elastomeric monofilament is only disclosed as being used in the first set of yarns. For purposes of examination, the bicomponent monofilaments recited in claim 7 will be examined as if they are the first set of yarns and not the second set of yarns.

11. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The disclosure does not teach elastomeric monofilaments having a denier of 2200. The monofilaments are only taught having a denier of 2250. However, the second set of yarns, the textured polyester yarns are disclosed as having a denier of 2250.

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12. Claims 6, 7, and 11 – 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. The phrase “textured polyester yarns with an elastomeric base component” in claim 6 is indefinite. As set forth in section 11 of the previous Office Action it is unclear what is meant by “elastomeric base”. Are the yarns made from elastic polyester filaments, i.e., the polymer itself comprises an elastomeric component? Or, are the yarns made from a blend of textured polyester filaments and elastomeric filaments? How is the elastomeric component present, as individual fibers, or as a component of the polyester polymer itself? Claims 7 and 11 – 14 are rejected due to their dependence on claim 6.

14. Claim 7 is rejected. It is unclear how the second yarns comprise a bicomponent sheath/core yarn. Is this the elastomeric base component in the textured polyester yarns? Or is the sheath/core fiber added to the textured polyester yarns with an elastomeric base component?

Priority

15. As set forth in section 14 of the previous Office Action, it was determined that the Applicant was granted an effective filing date of January 6, 1998, based on US Patent 5,856,249. However, priority was not granted based on US 5,807,794, US 5,632,526, or US, 5,533,789 because the claimed subject matter is not supported in US 5,807,794. While it is acknowledged that all three of these patents disclose fabrics comprising elastomeric monofilaments running approximately perpendicular to textured polyester yarn, as argued by the Applicant (Amendment B, section 8), none of these patents disclose that the monofilaments and yarns are “interwoven” as is recited in claim 6. In fact, each patent specifically discloses that the yarns are tied or

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knitted together by additional yarns in the knit fabric. Further, US 5,807,794 fails to teach that the textured polyester yarns have an elastomeric base, or even that the polyester yarns can be blended with elastic filaments as is also recited in claim 6. Also, all three patents additionally fail to teach the elastomeric component in the texturized polyester yarns are stabilized against ultraviolet radiation another feature recited in claim 6. Therefore, priority is only given based on US 5,856,249 which was filed January 6, 1998. ***Claim Rejections - 35 USC § 103***

16. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

17. Claim 6, 7, and 10 - 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gretzinger et al. in view of Stumpf et al. (6,035,901).

The features of Gretzinger et al. have been set forth in the previous Office Actions. Gretzinger et al. discloses a woven fabric comprising an elastomeric sheath/core monofilament, corresponding to the Applicant's first yarns, running in one direction and a set of yarns, corresponding to the Applicant's second yarns, running in a perpendicular direction. The elastomeric monofilament can include UV stabilizers. Gretzinger et al. discloses that the elastomeric monofilament comprises a sheath which has a melting temperature at least 20°C lower than the melting temperature of the core (column 8, lines 64 – 66). Additionally, Gretzinger et al. disclose that the perpendicular yarns can be made from polyester fibers and include minor amounts of elastomer dispersed therein. Since Gretzinger et al. discloses stabilizing the elastomeric monofilaments, it would have been obvious for one having ordinary skill in the art to stabilize the elastomeric material dispersed in the perpendicular yarns as well to

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delay the degradation of the yarns by improving the elastomeric materials resistance to UV light.

Gretzinger et al. fails to teach texturing the yarns.

Stumpf et al. is drawn to woven seating support fabrics. Stumpf et al. discloses a woven fabric comprising elastomeric monofilaments running in one direction and yarns comprising polyester and elastic filaments running in the perpendicular direction, as shown in Figures 36 - 38 (column 17, lines 5 - 10). The yarns comprise multi-filaments which are either spun, textured, or twisted yarns mixed with elastic filaments (column 18, lines 63 - 66). The textured yarns provide the woven fabric with more bulk which increases the softness of the yarns and makes the woven support more comfortable and have a better hand. Therefore, it would have been obvious for one having ordinary skill in the art to substitute the textured polyester yarns with an elastic base taught by Stumpf et al. for the yarns taught by Gretzinger et al. to improve the hand and softness of the woven support fabric. Therefore, claims 6 and 7 are rejected.

Finally, Gretzinger et al. does not teach the density or denier of the warp and fill yarns. However, Gretzinger et al. disclose that the density and denier of the fill and warp yarns can be varied (column 10, lines 63 - 68). Therefore, it would have been obvious to one having ordinary skill in the art to choose the claimed density (i.e. picks/inch and ends/inch) and deniers, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215. Changing the density of the yarns and the denier of the yarns would allow one of ordinary skill in the art to control the breathability, texture, hand, weight, and strength of the fabric. Therefore, claims 11 - 14 are rejected.

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Gretzinger et al. fails to teach using a fabric woven into a barathea weave. However, it would have been obvious for one having ordinary skill in the art to choose a known weave pattern based on its suitability for the intended use as a matter of design choice. It would be obvious to one of ordinary skill in the art to choose a weave pattern which will be comfortable to the user by placing the softer yarns on the surface of the fabric while providing equally distributed support to the user. Therefore, claim 10 is rejected.

18. Claims 6, 7, and 10 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stumpf et al. in view of Gretzinger et al.

The features of Stumpf et al. and Gretzinger et al. have been set forth above. Stumpf et al. disclose a woven fabric with an elastomeric monofilament, corresponding to the Applicant's first set of yarns, in a first direction and a spun or textured yarn, corresponding to the Applicant's second set of yarns, in a second perpendicular direction. The spun or textured yarns can include elastic components incorporated into each strand 376 (column 18, line 66 – column 19, line 2).

Stumpf et al. fails to teach that the elastomeric yarns are sheath/core bicomponent yarns. Gretzinger et al. is drawn to woven seat supports. Gretzinger et al. teach using a sheath/core bicomponent yarn as the elastomeric monofilament in the woven seat support. The sheath can be heat set to stabilize the weave by bonding the yarns and the monofilaments together. The sheath has a melting point of at least 20°C below the melting point of the core. Additionally, Gretzinger et al. discloses adding UV stabilizers to the elastomeric filaments. Therefore, it would have been obvious for one having ordinary skill in the art to substitute the sheath/core bicomponent yarn taught by Gretzinger et al. for the elastomeric components in the woven seat support taught by Stumpf et al. so that the fabric can be bonded at the crossovers to increase the stability of the

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fabric and make it less likely to unravel. Additionally, it would have been obvious to one having ordinary skill in the art to add UV stabilizers, as taught by Gretzinger et al., in the elastomeric filaments taught by Stumpf et al. to increase the life of the elastomeric material in the seat support by improving the elastomeric filaments resistance to UV light. Thus, claims 6 and 7 are rejected.

Stumpf et al. discloses that the elastomeric monofilament can have a denier of 2350 (column 17, lines 22 – 23) and have a density of about 24 – 26 monofilaments per inch (column 18, line 59). Additionally, Stumpf et al. discloses the density of the yarns is about 7 – 10 yarns per inch (column 19, lines 17 – 18). However, it would have been obvious to one having ordinary skill in the art to choose the claimed density (i.e. picks/inch and ends/inch) and deniers, since it has been held to be within the general skill of a worker in the art to discovering an optimum value of a result effective variable (i.e., density and denier) as set forth above.

Stumpf et al. fails to teach using a fabric woven into a barathea weave. However, it would have been obvious for one having ordinary skill in the art to choose a known weave pattern based on its suitability for the intended use as a matter of design choice. It would be obvious to one of ordinary skill in the art to choose a weave pattern which will be comfortable to the user by placing the softer yarns on the surface of the fabric while providing equally distributed support to the user as taught by Stumpf et al. (column 19, lines 19 – 38). Therefore, claim 10 is rejected.

19. Claims 6, 7 and 10 - 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over McLarty, III (5,855,991) in view of Gretzinger et al.

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The features of McLarty, III '991 have been set forth in the previous Office Actions. McLarty, III '991 discloses a woven fabric comprising textured polyester yarns intermingled with elastomeric components running in one direction and sheath/core bicomponent monofilaments running in the perpendicular direction. The sheath component has a melting temperature greater than 30°C below the melting temperature of the core component (column 3, lines 55 – 57). The monofilament has a denier of about 2250 (column 3, lines 53 – 54). A denier of about 2250 would include 2200 as recited in claim 13. Additionally, the fabric is woven to have about 22 ends per inch and about 20 picks per inch. About 22 ends per inch would include 20 ends/inch recited in claim 12. McLarty, III '991 fails to teach using UV stabilized elastomeric components.

The features of Gretzinger et al. have been set forth above. Gretzinger et al. discloses UV stabilizers are known additives in elastomeric fibers. Therefore, it would have been obvious for one having ordinary skill in the art to add UV stabilizers to the elastomeric components in both types of yarns in the woven fabric taught by McLarty, III '991 to increase the life of the fabric by increasing the fabric's resistance to UV degradation. Therefore, claims 6, 7, and 11 – 14 are rejected.

McLarty, III '991 fails to teach using a barathean weave pattern. It would have been obvious for one having ordinary skill in the art to choose a known weave pattern based on its suitability for the intended use as a matter of design choice. Further, it would be obvious to one of ordinary skill in the art to choose a weave pattern which will be comfortable to the user by placing the softer yarns on the surface of the fabric while providing equally distributed support to the user. Therefore, claim 10 is rejected.

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Conclusion

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

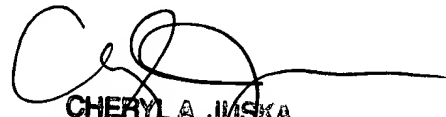
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (703) 605-1170. The examiner can normally be reached on Monday - Friday (9:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

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Jenna-Leigh Befumo
February 24, 2002



CHERYL A. JASKA
PRIMARY EXAMINER